Fiscal Year

2014

Rappahannock Regional Solid Waste Management Board
Annual Financial & Operational Report

Rappahannock Regional Solid Waste Management Board
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Mission and Vision

R-Board Mission

The mission of the Rappahannock Regional Solid Waste Management Board (R-Board) is to provide professional, courteous, and intelligent service and solutions to the waste disposal needs of citizens residing in Stafford County and the City of Fredericksburg.

R-Board Vision

The R-Board's vision is to operate the best landfill in Virginia. Being the best landfill includes environmentally sound solid waste management policies and having an active Reduce, Reuse, and Recycling program, all coupled with outstanding customer service. The R-Board intends to continually strive to be a leader in the waste management industry and to set the example for others to emulate.

Virginia Environmental Excellence Program

The R-Board Regional Landfill remains an E3 certified facility within the Virginia Environmental Excellence Program administered by the VA Department of Environmental Quality. In order to be qualified as an exemplary environmental enterprise, a facility must have a good compliance history, a fully implemented environmental management system, and demonstrated performance.

Operational Overview

Regional Landfill
The R-Board began filling Cell F-1 in July 2013 and expects to have capacity until late 2015. The Regional Landfill received 127,000 tons of waste in FY14, an 11% increase over FY13.

This picture of the first lift was taken in July 2013 looking south from the north edge of the cell.

The landfill gas collection system is designed to control decomposition gases and odor generated by the buried waste. Settlement and unintentional damage created the need for repairs before the addition of new wells into the system.

Landfill staff worked through good and bad weather in February to repair piping in the landfill gas collection system.

The landfill gas collection system was expanded to include Cell E this spring. 13 landfill gas extraction wells were drilled and connections were made to the existing system to increase the collection of methane.

The drill rig bores a 36" diameter hole to install the screened pipe for the landfill gas extraction well.

During the early fall of 2013, landfill operations staff came together to provide a solution to leachate seeps that were prevalent on the slopes of closed cells at the facility.

Heavy equipment operator, Keith English, executes the solution to the seeps. By digging out the waste to the confining layer and driving a pipe into the waste mass, liquid is allowed to drain to the inside of the landfill rather than down the outside of the slope.

Recycling
In addition to our drop-off locations, all residents with curbside recycling service participate in single-stream recycling. The DEQ approved a **49.2% recycling rate** for Stafford County and the City of Fredericksburg. The jurisdictional recycling rate includes tonnage passed through R-Board facilities, as well as, amounts voluntarily reported by commercial entities.

A City of Fredericksburg resident has placed their full recycling bin at the curb for collection.

Composting
The R-Board's Rappa-Grow compost is becoming more and more popular. While we sold less than half of the 5-gallon compost buckets in FY14 than we did in FY13, compost-by-the-yard sales increased 445% in the same period.

Strawberries planted in a 50-50 mix of Rappa-Grow and garden soil.

Employee Achievements and Accolades

R-Board employees are encouraged to seek out certifications and education to improve their skills and knowledge. Jason Pauley and Ricky Markwardt renewed their Manager of Landfill Operations (MOLO) certificates. Ricky Markwardt also recertified his VA license to operate waste management facilities. Julie Williams-Daves earned her Manager of Landfill Operations (MOLO) certification and a VA license to operate waste management facilities. Floyd Bloxton recertified his Automobile Technician and Master Medium/Heavy Truck Technician licenses.

Donald Skinner received a great compliment from a citizen who called the R-Board office to show her appreciation for his assistance. The citizen discovered that someone had dumped trash in her neighborhood. She cleaned it up and when she arrived at the Belman Road Recycling Center, Donald helped her unload and properly dispose of the material. The citizen was very appreciative of his help.

Dennis Kenworthy also received praise from a citizen who emailed the R-Board to say how helpful he was when she locked her keys in her car, with the engine running and a dog in the front seat, at the Belman Road Recycling Center. Dennis made sure the resident kept cool on a hot day in the gate building while waiting on AAA. Dennis focused the facility camera on the vehicle for her to keep an eye on her pet while they were waiting inside the building.

The rest of our staff that interact with the general public and our commercial customers routinely receives many informal accolades. Our team members exhibit a “can do”, service-oriented attitude as they go about their daily work.

The following employees celebrated a significant milestone in FY14 for their years of service:

- Thurman “Buck” Payne: 20 years
- Donald Skinner: 15 years
- Robert Brooks: 12 years
- Reece Banks: 10 years
- Steve Pekary: 3 years

Customer Service

The R-Board has a strong history of serving other government agencies and the citizens in its jurisdiction.

- Community Pride is a program where the R-Board loans out dumpsters for the weekend to neighborhoods for community cleanups April through September. In FY14, 31 neighborhoods participated.

- Snow plowing is provided for the VRE lot on Leeland Road, the fire and rescue training facility, a lot at the Rowser Building, and various fire departments as needed. Reece Banks is the primary employee supporting these efforts, as well as Thad Beach and Rick Markwardt in the recent year.
- Maintenance, such as grading, is provided to the gravel VRE lot on Leeland Road, primarily by Doug Martinski.
- Assistance with equipment and heavy equipment operator support is provided regularly to the Sheriff's office in order to maintain various aspects of their facility.
- Periodically, on-road roll back trucks are loaned to the City of Fredericksburg to assist in their service needs while their vehicle undergoes repairs and maintenance.

Customer Survey

In May, staff performed a comprehensive survey to capture site usage at the Eskimo Hill and Belman Road drop-off sites. This traffic study includes residents dropping off trash and various recyclables.

2014 CUSTOMER SURVEY								
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	**TOTALS**
BELMAN ROAD								
Fredericksburg	204	156	164	164	180	238	180	**1,286**
Stafford	149	123	103	127	160	166	165	**993**
ESKIMO HILL ROAD								
Fredericksburg	30	27	13	39	46	28	18	**201**
Stafford	714	480	532	515	644	1,009	1,027	**4,921**
TOTALS	**1,097**	**786**	**812**	**845**	**1,030**	**1,441**	**1,390**	**7,401**

Table 1 Customer Survey Results

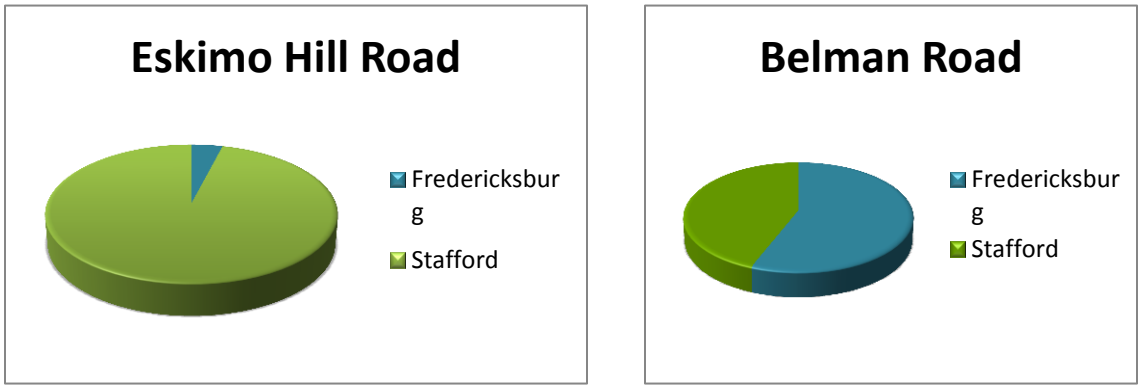

Figure 1 Customer Survey Results

Financial Summary (Unaudited)

Operating Expenses – FY2014

	Original Budget	Adjusted Budget	Actuals	Over/Under
Compensation	$2,000,019	$2,000,019	$1,820,063	-9%
Operations	$2,193,612	$2,286,630	$1,954,228	-19.5%
Capital	$641,226	$940,067	$658,829	-30%
Total	$4,834,857	$5,226,716	$4,433,120	-15%

Table 2 Operating Expenses

Revenue – FY2014

	Adopted FY14	Actuals	Under/Over
Commercial	$3,200,000	$3,203,439	0.1%
Recycling	$ 405,000	$271,591	-33%
Sludge/Utilities	$ 150,000	$151,474	1%
Municipal	$96,000	$96,000	0%
Misc. Revenue	$10,000	$42,664	426%
Sale of Landfill Gas	$68,000	$22,580	-67%
Grants	$20,000	$26,894	34%
Interest	$45,000	$29,797	-68%
TOTAL	**$3,994,000**	**$3,844,439**	**-3.7%**

Table 3 Revenue

Weight & Material Summary

CATEGORY	FY2014 Weight	FY2013 Weight	% Difference
BILLABLE			
Commercial Waste	28,771	23,911	20%
Residential Waste	35,569	36,948	-4%
Mixed Load-$71/T	17	21	-20%
Debris Waste	23,487	19,923	18%
Dirt	3,094*	26,824*	-88%
Tires/White Goods	133	356	-63%
Compost Sludge	8,723	8,831	-1%
SEW Sludge	36	195	
BILLABLE TONNAGE	**99,830**	**117,008**	**-15%**
NON-BILLABLE			
Stafford County	16,029	12,152*	32%
Fredericksburg	8,984	8,058	11%
Belman	3,009	3,594	-16%
Tires residential	407	1,114	-63%
Cleanups	141	95	48%
NON-BILLABLE TONNAGE	**28,570**	**25,013**	**14%**
RECYCLING	7,795	6,990	12%
TOTAL TONNAGE	**136,195**	**149,012**	**-9%**
% NON-BILLABLE	**21%**	**17%**	
**estimated weights*			

Table 4 Weight & Material Summary

Portfolio Composition

Total Deposits and Investments
As of June 30, 2014

Security Type	Amount
U.S. Treasuries	$468,193.27
Federal Agencies	$1,792,709.10
Commercial Paper	$699,847.00
Corporate Notes / Bonds	$1,342,342.47
Certificates of Deposit	$1,451,668.48
Municipal Obligations	$100,137.33
Money Market Fund	$120,054.89
Total	**$5,974,952.54**

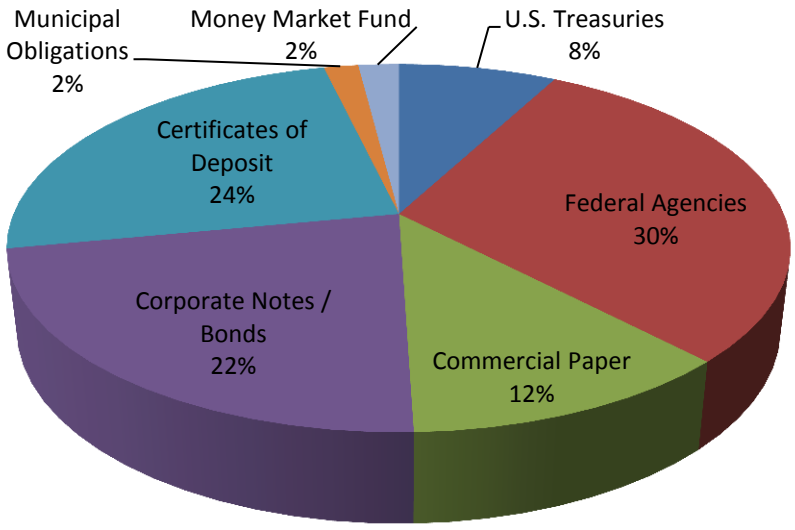

Figure 2 Deposits & Investments Percent Portfolio

Recycling & Diversion

The Virginia Department of Environmental Quality approved a 49.2% recycling rate for the City of Fredericksburg and Stafford County. For several years, the R-Board has consistently held one of the highest recycling rates in the state.

Recycling remains voluntary and the R-Board provides residents with several locations for their various recyclables. The following locations accept single-stream recyclables from residents:

Fredericksburg	Stafford
Belman Road	Eskimo Hill Road
Hugh Mercer Elementary	Gayle Middle
Walker-Grant Middle	Kaz's Auto
	Rowser Building

All of these sites are available seven days per week. The Belman Road and Eskimo Hill Road locations are manned.

Special Items

In addition to single-stream and scrap metal recycling, the residential use area at the Regional Landfill on Eskimo Hill Road offers collection of special items such as fluorescent bulbs, cell phones, used oil, antifreeze, used cooking oil, and car batteries. Belman Road has collection facilities for used oil and anti-freeze.

Car batteries are kept behind a locked fence at the Regional Landfill.

Used cooking oil recycling began in 2013. This popular program netted 720 gallons in FY14. A local business owner is turning the used cooking oil into bio-diesel.

The collection of fluorescent bulbs for recycling was reinforced in an effort to encourage increased participation and prevent breakage of these mercury containing bulbs. Since the program's inception in FY2006, the previous highest recorded amount in a fiscal year was 7,200 linear feet in FY2009. In FY14, the program recycled 30,900 linear feet of bulbs.

The picture on the left shows the residential collection point for fluorescent bulbs and the picture on the right shows the R-Board's storage area. Bulbs are kept boxed and dry.

The R-Board is not required by regulation to collect residential materials for recycling or diversion from the landfill. All of these materials are collected on a voluntary basis because the R-Board desires to handle potentially hazardous items as responsibly as possible. Even though the R-Board accepts a number of items for recycling and diversion daily, some special items are limited to collection events held twice each year. These free household hazardous waste collection days are for residents living in Stafford County and the City of Fredericksburg.

Staff and volunteers direct traffic to our contractor for the proper disposal of household chemicals, including paints and old gasoline.

R-Board Household Hazardous Waste Collection Totals
FY2001 to FY2014

Participants	Gallons of Oil/Antifreeze	Gallons of Other Liquids	Linear Feet of Fluorescent Bulbs	Car Batteries	Total Cost (14 years)
7,108	388,370	135,530	62,020	23,600	$567,070

Table 5 Household Hazard Waste Collection Results

Litter Control

Goals

- Coordinate cleanup efforts from a variety of organizations
- Maximize resources available
- Provide targeted clean up efforts to high visibility and high maintenance areas
- Provide quick cleanup response to citizen concerns
- Offer service to both jurisdictions as needed

Programs

- Community Pride Neighborhood Cleanups
- Road Cleanup Resources
- Full-time 4-Man Litter Crew
- Rappahannock Regional Jail
- Rappahannock Area Office on Youth
- Rappahannock Regional Jail Adult Probationer Program
- One-time Special Clean-ups
- One-time Resident Cleanups
- Illegal Sign Removal

Staff monitors over 1,400 miles of roadways for the City of Fredericksburg and Stafford County, using both paid and non-paid labor to clean up litter. In FY14, total cleaning efforts collected 788,398 pounds of litter from roadsides.

The R-Board initiated a new effort utilizing adult probationers at the Rappahannock Regional Jail in FY13. These probationers have court assigned hours of service specifying that their time be spent cleaning up roadside litter. The program grew significantly in FY14. The number of probationers went from four in FY13 to 20 in FY14. The total hours given increased from 38 in FY13 to 390 in FY14 and pounds of litter increased from 4,000 in FY13 to 16,280 in FY14. R-Board staff prepares probationers to enter the program through safety briefings. Staff is also are responsible for managing and tracking the probationers' fulfillment of the required community service.

The R-Board manages data collection and provides all operational supplies for these paid and non-paid programs. The supplies include trash bags, pickers, gloves, safety vests, signage, and bag retrieval and weighing of the collected litter.

Officer Baskins with some of the Regional Jail inmates who are part of the roadside litter cleanup crew.

Annually, the R-Board prepares the Department of Environmental Quality Non-Competitive Litter Grant report. It also manages the grant funds received. Grant funds are used primarily to cover the cost of operational supplies and also for environmental education and outreach programs. Because the R-Board represents the City of Fredericksburg and Stafford County, some of the grant funds are designated for projects undertaken by the Fredericksburg City Clean and Green Commission. The most recent significant support has been supplying the new doggie bag stations and bag refills around the City's growing walking trail systems and parks.

Illegal Sign Removal

The R-Board Litter Crew manages and tracks data for the Illegal Sign Removal Program. The Code of Virginia 33.1-373 states that any sign or advertisement posted within the limits of any highway are a nuisance and may be removed. The Crew assesses the placement of temporary signs during their routine patrols. If it is determined that a temporary sign is the right-of-way (ROW), the sign is removed and disposed of properly.

It is the sign owner's responsibility to know the laws and the ROW, prior to placing the signage. The width of the ROW is variable for each property and is accessible through County records and online through the Commissioner of the Revenue's Real Estate Online parcel search.

The R-Board staff has removed 8,546 illegally placed signs for the FY14 year.

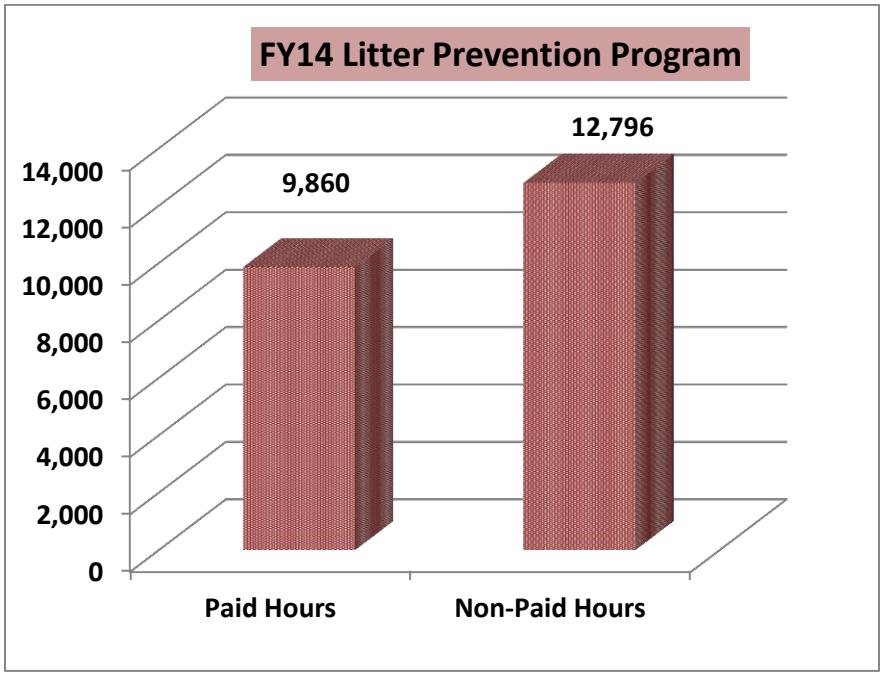

Figure 3 Litter Program: Paid vs. Non-Paid Hours

Non-paid hours are valued at $281,900 and 99% of non-paid hours were used for road cleaning.

The Litter Crew assisted in cleaning up a large homeless camp in March in the City of Fredericksburg. City staff placed a 20-yd dumpster, cleared a path to the site, and operated 2 small front end bucket loaders. The Regional Jail supplied six inmates and an Officer to bag the debris. The R-Board supplied two employees, trash bags, hand sanitizer, and safety equipment. CSX provided an employee to ensure everyone's safety.

Outreach & Education

Programs

Backyard Composting 101 is the R-Board's primary adult outreach program. In FY14, 61 individuals attended five composting classes and purchased 20 composting bins. In nearly seven years of Backyard Composting 101, 735 participants have recycled an estimated 128 tons of organic material in their backyards.

Michael Recycle remains a popular outreach program targeting preschoolers and kindergarteners. It is a 30 minute presentation that begins with a story about a recycling superhero and includes a take-home craft. Staff visited one preschool, one kindergarten, and the Stafford County Head Start providing recycling education to 458 young children and their families.

Worms Eat My Waste has become a popular elementary age activity promoting composting and recycling. This year staff created worm terrariums with students from Widewater Elementary Green Thumb Club, Hugh Mercer Elementary first graders, and at an afterschool enrichment program at Porter Library.

R-Board staff conducted 12 landfill tours for more than 232 people. The educational trailer visited six venues, and staff and volunteers engaged over 3,000 people during the year. The R-Board garnered 24 new Likes on Facebook, for a total of 128, and reached an additional 2,888 people through posts and photos.

Public Outreach/Environmental Education Service Levels	FY13	FY14
Programs Offered	55	39
People Reached (Face to Face Interaction)	6,834	3,658
Website Hits	13,581 (monthly avg = 1,132)	13,991 (monthly avg = 1,166)

Table 6 Public and Educational Outreach Summary

Figure 4 Total Monthly R-Board Website Visits

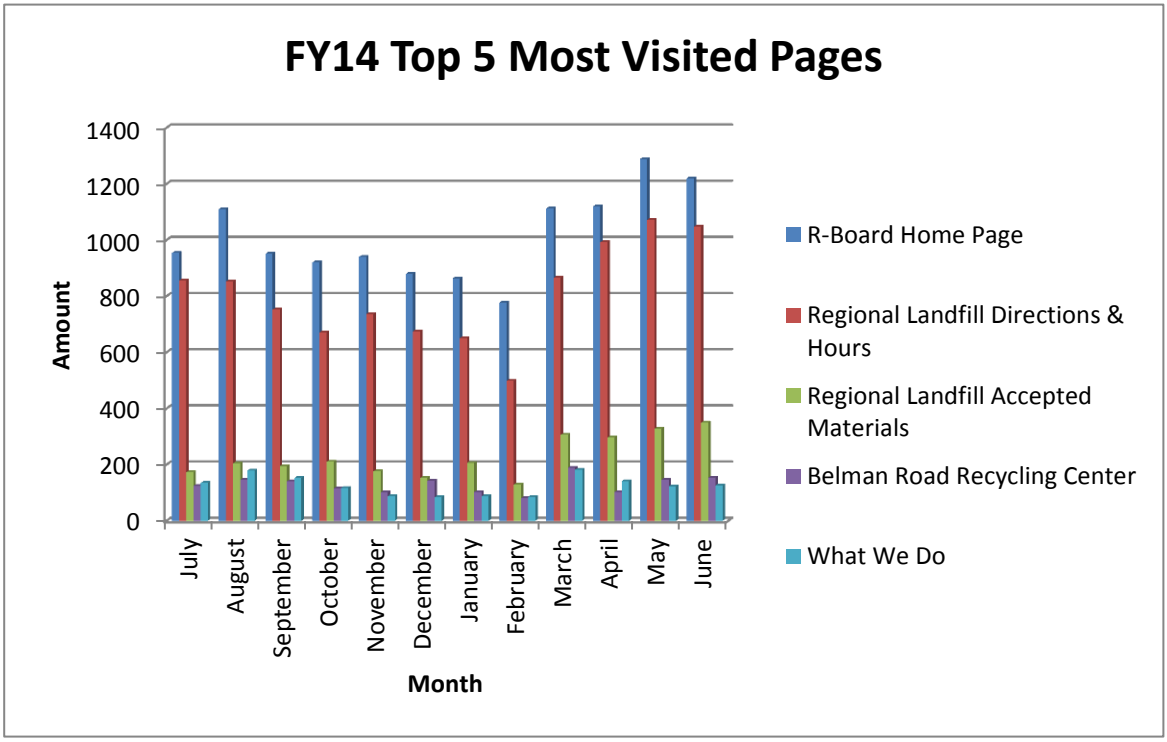

Figure 5 Top 5 Most Visited R-Board Website Pages

Outreach

The R-Board used litter grant funds to purchase bins for recycling at Hugh Mercer Elementary School in the City of Fredericksburg. This school was selected to increase use of the underutilized single-stream recycling container located there and revitalize the school staff and student recycling program.

Environmental Manager, Julie Williams-Daves, introduces the new recycling program and classroom bins to first graders at Hugh Mercer Elementary for America Recycles Day.

Appendix 1

VA DEQ 2013 Recycling Rate Letter

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
Fax: 804-698-4019 - TDD (804) 698-4021
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

June 5, 2014

Ms. Diane Jones
Rappahannock Regional SWMB
489 Eskimo Hill
Stafford, Virginia 22554

Dear Ms. Jones:

We have completed our review of the Rappahannock Regional Solid Waste Management Board's 2013 Recycling Rate Report submitted pursuant to The Virginia Regulations for Solid Waste Management Planning (9VAC-20-130-165). State law (10.1-1411) and section 120.B. of the regulations require each city, county, town or region to maintain a minimum recycling rate and to report the data for the previous calendar year to DEQ by April 30 of each year. The members of the Solid Waste Planning Unit were to meet or exceed a 25% mandated recycling rate based upon the criteria established in 2006.

We accept your data as submitted with two data edits, and your calculated recycling rate for CY 2013 will be reported as 49.2 %. This information has been forwarded to DEQ's Office of Waste Permitting and Compliance for consideration during their reviews of the Solid Waste Management Plans.

Attached for your review and filing is our worksheet that shows the DEQ review of your report. Please contact me with any questions.

Sincerely,

G. Stephen "Steve" Coe

G. Stephen Coe
Environmental Specialist - Recycling
Office of Land Protection & Revitalization

Enclosure
Cc: RRR file